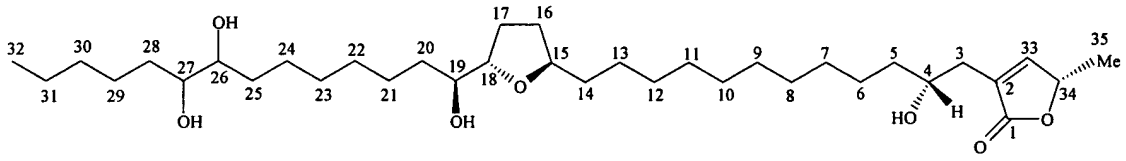
This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

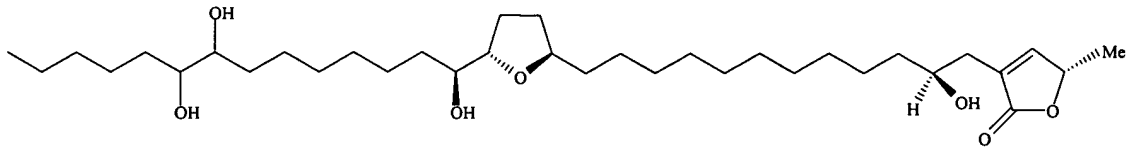
Claim 1 (currently amended): ~~Isolated and purified~~ An isolated and purified Annonaceous acetogenin compound ~~compounds~~ having the structure ~~structures~~ of: ~~a-g, wherein~~

a. muricin A having ~~has~~ the formula of:



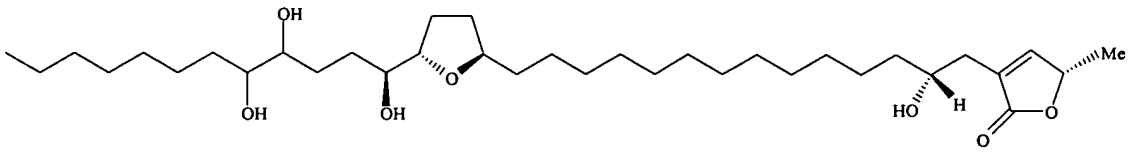
said muricin A having an α, β-unsaturated γ-lactone with a hydroxyl group at C-4, a mono-THF ring placed between C-15 and C-18 with one flanking hydroxyl in a threo conformation, two methylene groups of the mono-THF ring corresponding to a trans conformation, two hydroxyl groups at C-26 and C-27 as vicinal diol assigned as threo based, and the stereochemistry at C-34 on the γ-lactone fragment performed in (S)-configuration;

b. muricin B having ~~has~~ the formula of:



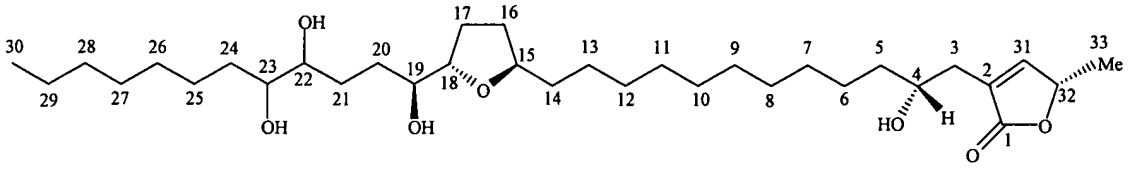
said muricin B having an α, β-unsaturated γ-lactone with a hydroxyl group at C-4, a mono-THF ring placed between C-15 and C-18 with one flanking hydroxyl in a trans/threo conformation, two methylene groups of the mono-THF ring corresponding to a trans conformation, two hydroxyl groups at C-26 and C-27 as vicinal diol assigned as threo based, and the stereochemistry at C-34 on the γ-lactone fragment performed in (S)-configuration;

c. muricin C having ~~has~~ the formula of:



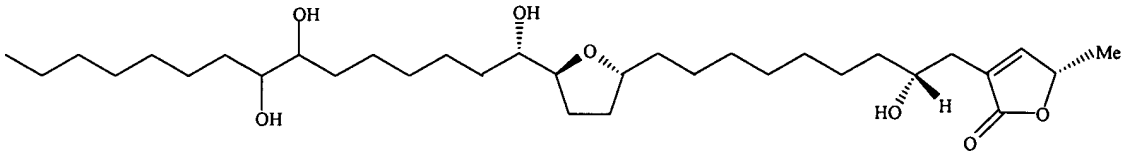
said muricin C having an α, ß-unsaturated γ-lactone with a hydroxyl group at C-4, a mono-THF ring placed between C-17 and C-20 with one flanking hydroxyl in a trans/threo or threo/trans conformation, two hydroxyl groups at C-24 and C-25 as vicinal diol assigned as threo based, and the stereochemistry at C-34 on the γ-lactone fragment performed in (S)-configuration;

d. muricin D having ~~has~~ the formula of:



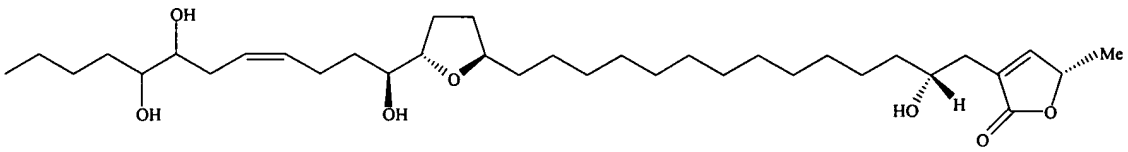
said muricin D having an α, β-unsaturated γ-lactone with a hydroxyl group at C-4, a mono-THF ring placed between C-15 and C-18 with one flanking hydroxyl in a threo/trans conformation, two hydroxyl groups at C-22 and C-23 as vicinal diol assigned as threo based;

e. muricin E having ~~has~~ the formula of:



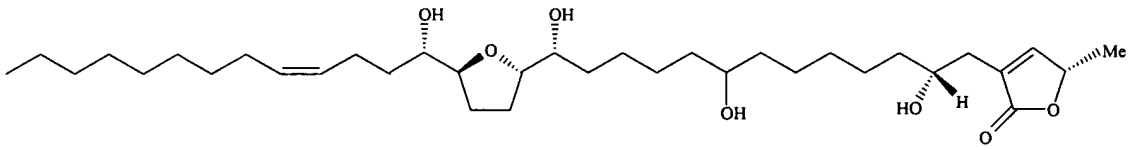
said muricin E having an α, β-unsaturated γ-lactone with a hydroxyl group at C-4, a mono-THF ring placed between C-12 and C-15 with one flanking hydroxyl in a threo/trans conformation, two hydroxyl groups at C-22 and C-23 as vicinal diol assigned as threo based;

f. muricin F <u>having</u> ~~has~~ the formula of:



said muricin F having an α, β-unsaturated γ-lactone with a hydroxyl group at C-4, a mono-THF ring placed between C-17 and C-20 with one flanking hydroxyl in a threo/trans conformation, two hydroxyl groups at C-27 and C-28 as vicinal diol assigned as threo based, and a double bond determined at C-24/C-25; ~~and~~ <u>or</u>

g. muricin G <u>having</u> ~~has~~ the formula of:



said muricin G having an α, β-unsaturated γ -lactone with a hydroxyl group at C-4, a mono-THF ring placed between C-16 and C-19 with one flanking hydroxyl in a threo/trans/threo conformation, one hydroxyl group~~s~~ formed at C-10, a double bond determined at C-23/C-24, and the stereochemistry at C-34 on the γ-lactone fragment performed in (S)-configuration.

Claim 2 (currently amended): A method for isolating Annonaceous acetogenins compounds ~~according to claim 1~~ <u>from *Annona muricata* seeds</u> comprising:

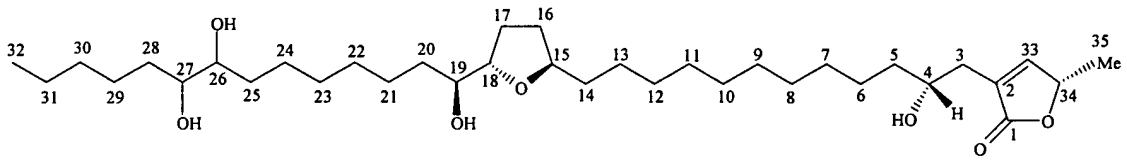
extracting said Annonaceous acetogenins compounds ~~compounds~~ from said *Annona muricata* seeds with MeOH to obtain a MeOH extract at room[.] temperature; and

evaporating said MeOH from said MeOH extract; and

partitioning said evaporated MeOH extract in a $CHCl_3$ and aqueous mixture, whereby said Annonaceous acetogenins compounds are in said $CHCl_3$ layer of said $CHCl_3$ and aqueous mixture;

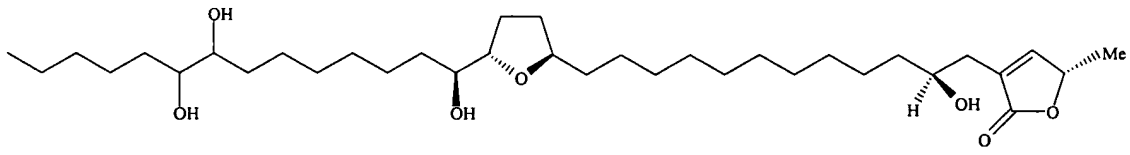
wherein said Annonaceous acetogenins compounds comprise

a. muricin A having the formula of:



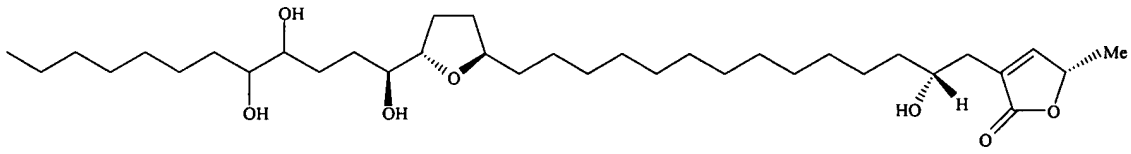
said muricin A having an α, β-unsaturated γ-lactone with a hydroxyl group at C-4, a mono-THF ring placed between C-15 and C-18 with one flanking hydroxyl in a threo conformation, two methylene groups of the mono-THF ring corresponding to a trans conformation, two hydroxyl groups at C-26 and C-27 as vicinal diol assigned as threo based, and the stereochemistry at C-34 on the γ-lactone fragment performed in (S)-configuration;

b. muricin B having the formula of:



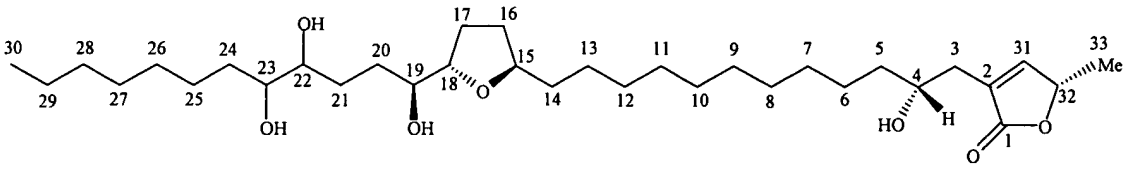
said muricin B having an α, β-unsaturated γ-lactone with a hydroxyl group at C-4, a mono-THF ring placed between C-15 and C-18 with one flanking hydroxyl in a trans/threo conformation, two methylene groups of the mono-THF ring corresponding to a trans conformation, two hydroxyl groups at C-26 and C-27 as vicinal diol assigned as threo based, and the stereochemistry at C-34 on the γ-lactone fragment performed in (S)-configuration;

c. muricin C having the formula of:



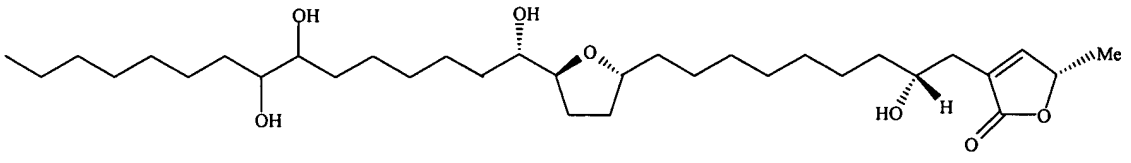
said muricin C having an α, ß-unsaturated γ-lactone with a hydroxyl group at C-4, a mono-THF ring placed between C-17 and C-20 with one flanking hydroxyl in a trans/threo or threo/trans conformation, two hydroxyl groups at C-24 and C-25 as vicinal diol assigned as threo based, and the stereochemistry at C-34 on the γ-lactone fragment performed in (S)-configuration;

d. muricin D having the formula of:



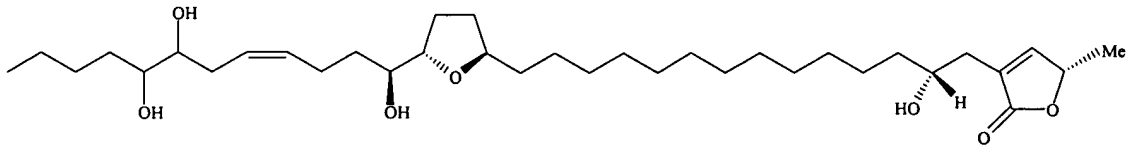
said muricin D having an α, β-unsaturated γ-lactone with a hydroxyl group at C-4, a mono-THF ring placed between C-15 and C-18 with one flanking hydroxyl in a threo/trans conformation, two hydroxyl groups at C-22 and C-23 as vicinal diol assigned as threo based;

e. muricin E having the formula of:



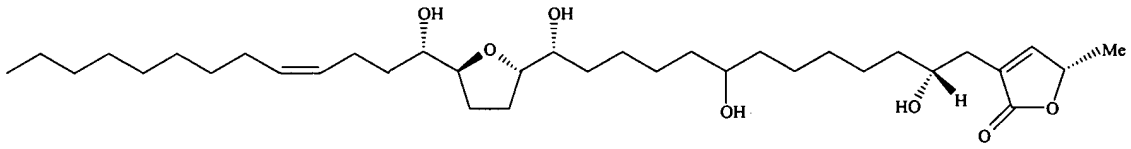
said muricin E having an α, β-unsaturated γ-lactone with a hydroxyl group at C-4, a mono-THF ring placed between C-12 and C-15 with one flanking hydroxyl in a threo/trans conformation, two hydroxyl groups at C-22 and C-23 as vicinal diol assigned as threo based;

f. muricin F having the formula of:



said muricin F having an α, β-unsaturated γ-lactone with a hydroxyl group at C-4, a mono-THF ring placed between C-17 and C-20 with one flanking hydroxyl in a threo/trans conformation, two hydroxyl groups at C-27 and C-28 as vicinal diol assigned as threo based, and a double bond determined at C-24/C-25; and

g. muricin G having the formula of:



said muricin G having an α, β-unsaturated γ -lactone with a hydroxyl group at C-4, a mono-THF ring placed between C-16 and C-19 with one flanking hydroxyl in a threo/trans/threo conformation, one hydroxyl groups formed at C-10, a double bond determined at C-23/C-24, and the stereochemistry at C-34 on the γ-lactone fragment performed in (S)-configuration.

Claims 3-4 (cancelled).

Claim 5 (currently amended): A pharmaceutical composition comprising ~~an~~ said Annonaceous acetogenin compound ~~amount of substantially pure muricins~~ of claim 1, and a pharmaceutically acceptable carrier.

~~wherein the Annonaceous acetogenin compound is muricins are selected from the group consisting of muricin A, muricin B, muricin C, muricin D, muricin E, muricin F, and muricin G; and~~

~~wherein the muricins are combined with a pharmaceutically acceptable carrier in said composition.~~

Claim 6 (currently amended): The isolated and purified Annonaceous acetogenin compound ~~pharmaceutical composition~~ as claimed in claim 1 [[5]], wherein said isolated and purified Annonaceous acetogenin compound ~~pharmaceutical composition~~ is cytotoxic to human cancer cells.

Claim 7 (currently amended): The isolated and purified Annonaceous acetogenin compound ~~pharmaceutical composition~~ as claimed in claim 6, wherein said human cancer cells are hepatoma cancer cells.

Claim 8 (currently amended): The method for treating a patient having a tumor, wherein said method comprising the step of:

administering an effective amount of said pharmaceutical composition according to claim 1 [[5]] to said patient having a tumor.

Claim 9 (currently amended): A method for treating a patient with hepatoma comprising administering to said patient with hepatoma an effective amount of said isolated and purified Annonaceous acetogenin compound ~~pharmaceutical composition~~ according to claim 1 [[5]].

Claim 10 (currently amended): The ~~isolated and purified~~ Annonaceous acetogenins compound ~~compounds~~ according to claim 1, wherein said compound is isolated from *Annona muricata.*

Claim 11 (currently amended): The ~~isolated and purified~~ Annonaceous acetogenins compound ~~compounds~~ according to claim 10, wherein said compound is isolated from seeds of *Annona muricata.*

Claims 12-18 (cancelled).

Claim 19 (currently amended): A method for ~~isolating and purifying~~ separating said Annonaceous acetogenins compounds according to claim 2 [[1]], comprising:

~~extracting said Annonaceous acetogenins compounds from *Annona muricata* seeds with MeOH to obtain an MeOH extract at room. temperature; and~~

~~evaporating said MeOH from said MeOH extract;~~

~~partitioning said evaporated MeOH extract in a $CHCl_3$ and aqueous mixture to separate said evaporated MeOH extract into a $CHCl_3$ layer and an aqueous layer;~~

collecting said $CHCl_3$ layer;

loading said $CHCl_3$ layer onto a ~~an~~ Si gel column and eluting ~~said isolated and purified~~ said Annonaceous acetogenins compounds from said Si gel column with a gradient containing n-hexane-$CHCl_3$ and $CHCl_3$-MeOH into 10 fractions; and

collecting fraction 7 and fraction 8 eluted from said Si gel column;

whereby muricin A, muricin B, muricin C, and muricin F are in fraction 7 of the Si gel column; and muricin D, muricin E, and muricin G are in fraction 8 of the Si gel column.

Claim 20 (cancelled):

Claim 21 (currently amended): The method according to claim 23 [[16]], wherein said reversed-phased HPLC is an ODS-5 column with MeOH-water at a volume ratio of about 88:12.

Claim 22 (previously presented): The method according to claim 17, wherein said reversed-phased HPLC is an ODS-5 column with MeOH-water at a volume ratio of about 86:14.

Claim 23 (new): The method according to claim 19, wherein said muricin A, said muricin B, said muricin C, and said muricin F of said fraction 7 are further separated by a reversed-phase high performance liquid chromatography.

Claim 24 (new): The method according to claim 19, wherein said muricin D, said muricin E, and said muricin G of said fraction 8 are further separated by a reversed-phase high performance liquid chromatography.